part of a multi-departmental City of Seattle series on getting a permit

Plan Requirements for Contruction in the Public Right of Way

Updated September 2006

Seattle Department of Transportation reviews and approves proposed construction work in the public right of way. When this work is performed under a private contract rather than a contract with the City of Seattle, the project plans must meet the standards and requirements in this publication.

Drafting Standards

- Plan sets for submittal Initial plan submittal may be done on 22"x34" sheets of paper (black ink print). Two copies are required. Final plans for permit issuance shall be on 22"x34" Mylar sheets. Use the City of Seattle Department of Transportation, Street Improvement title block border.
 - An AutoCAD title block is available on our web site at http://www.seattle.gov/transportation/stuse_SIP.htm, under SIP Plan Preparation.
- 2. Engineer's Seal Place the Professional Engineer's seal and original signature in the blocked area on the lower left portion of the sheet; include, the engineer's name, address and phone number. This is required on the final mylar plan.
- 3. Plan Title Block Use the following format for the title block in the lower right portion of the sheet: "MAIN STREET, et al" (first line), "STORM DRAIN, etc." (second line). The third line is used to identify street names when multiple streets are involved or for the subject shown on a particular sheet. This means the project is principally located on Main Street and primarily consists of storm drain improvements. See attached sample.
- **4. Ink and Screening** Draw in ink on Mylar, plot or print directly on Mylar or use permanent photo Mylar

- (no "sticky-back" or pasted pieces). Screen the base map which shows existing improvements.
- Survey Datum Use NAVD88 shown as vertical datum with Benchmarks and NAD83(1991) shown as horizontal datum.
- 6. Dimensions For all existing and proposed im provements, locate and show dimensions to City of Seattle survey monuments, monument lines, or street centerlines. Dimensioning must be done by stationing and offsetting from these control lines.
- 7. Scale For scales, use Horizontal 1" = 20', Vertical 1" = 10'. For business districts, SDOT Street Use Section requires Horizontal 1" = 10'.
- 8. Compass Orientation Draw the plan so the north arrow points to the left or to the top of the sheet.
- 9. Vicinity Map Include a vicinity map on the cover of or first sheet of the plans with a scale no less than 1" = 200'. Include right of way around the perimeter of the project plus a half block beyond the area of work. Shade the vicinity map area of scope of work and use as an index of the sheets.
- 10. Lettering Use of a lettering guide is preferred but very neat, legible, free hand lettering is acceptable. The minimum letter size is 1/8 inch. This will ensure the plan is still legible after microfilming or reduction to half size.
- 11. Symbols Use the standard symbols given in Standard Plans 002 and 003, Standard Plans for Municipal Public Works construction, current edition (Available from the Seattle Public Utilities, Record Vault, Seattle Municipal Tower Suite 4700 or download: http://www.seattle.gov/util/Engineering/CAD_Resources/2000i-2002_CAD_Support Files/index.asp

CADD Standards Guidelines

- The current edition of the "Seattle Standard Specifications" and "City of Seattle Standard plans shall be adhered to.
- 2. Features on the drawings shall be shown and noted in accordance with standard abbreviations and symbols (Standard Plan No 002 and 003) and be created in accordance with the SPU/ Seattle Department of Transportation drafting standards.
- **3.** All existing utilities, improvements and topography determined necessary in the project scope, shall be illustrated in the drawing.
- 4. Plans shall be prepared with such precision and in such detail as to permit the convenient layout in the field for construction and other purposes within a degree of accuracy acceptable to Seattle Department of Transportation.

If you are using CADD, these apply:

- **5.** CADD drawings shall be submitted as AUTOCAD release 14 (or later) .dwg files. All electronic files will be submitted for review.
- **6.** For CADD drawings, .dwg files should be created to plot a 22"x34" hard copy plan sheet.
- 7. For CADD files where the contract drawings indicate existing infrastructure or proposed improvements within the City's rights of way, the current SDOT Layering methodology shall be adhered to. For more information, refer to http://www.seattle.gov/util/Engineering/CAD_Resources/2000i-2002_CAD_Support Files/index.asp

Information Required on Plans

 Grades – If the road or alley adjacent to your property is not improved, research any existing grade and topography data from Seattle Public Utilities at Engineering Records Vault, Seattle Municipal Tower 47th Floor, 700 Fifth Avenue, (206) 684-5132.

If data is not available, the applicant shall conduct a topography survey of their project site as per attached drawing SURV-0001 for streets and SURV-0002 for alleys. If the street or alley adjacent to the proposed project is already improved to full street standards (concrete curbs, sidewalks, paving), the building grade shall be calculated by visiting the following website and using the web based tool http://www.seattle.gov/transportation/gradesheetintro.htm. The grades shown on the plan must agree with the building/alley grade calculated

using the web based tool, or be approved by the Seattle Department of Transportation.

All profiles and cross sections must show the proposed grade as well as the existing grade.

Show in the profile: centerline, top of curb, back of walk, access points along property, floor slab elevations, underground water mains, etc.

2. Existing Improvements and Topography -

Existing Improvements and Topography -Show all existing underground and surface improvements and topography in proximity to the proposed project. This information must be shown for the full width of the adjacent right of way, and at least 50 feet from the boundaries of the proposed project, to show possible impacts on neighboring properties.

Obtain information for existing surface and underground improvements at the Seattle Public Utilities Engineering Records Vault, Seattle Municipal Tower 47th Floor, 700 Fifth Avenue, (206) 684-5132. The "Vault" has information on public sewers, public storm drains, curbs, sidewalks, and grading.

For information on sanitary side sewers and service drains, see the DPD Permit Counter on the 20th floor of the Seattle Municipal Tower.

Obtain City Light, telephone, cable TV, steam, natural gas, and other private and public utilities information at the Street Use Permit Counter. Also, the Seattle Department of Transportation's Traffic Counter, also located on the 37th floor of Seattle Municpal Tower, has traffic signal information.

3. Sewer, Water, and Drainage - Provide profiles of all proposed sewer, water, and drain lines. Show existing underground improvements where they cross or connect to the new improvements.

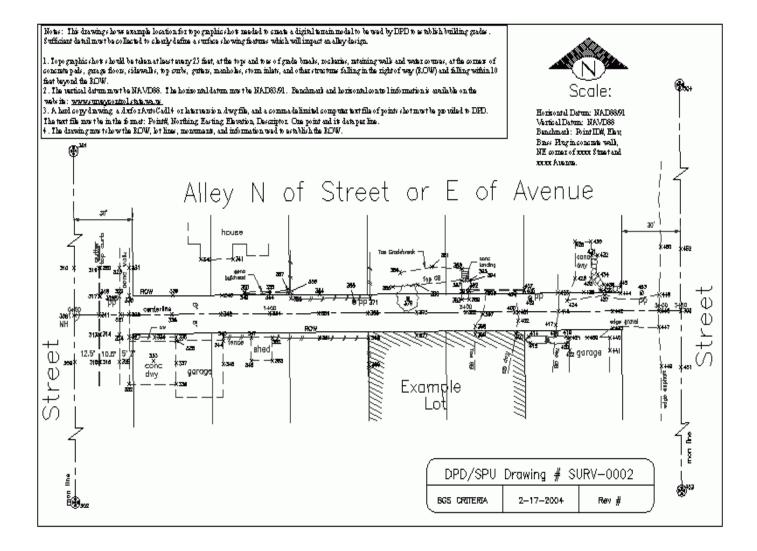
Show the storm water drainage discharge point to public system or natural water course. Provide drainage system details whether or not detention of storm water is required.

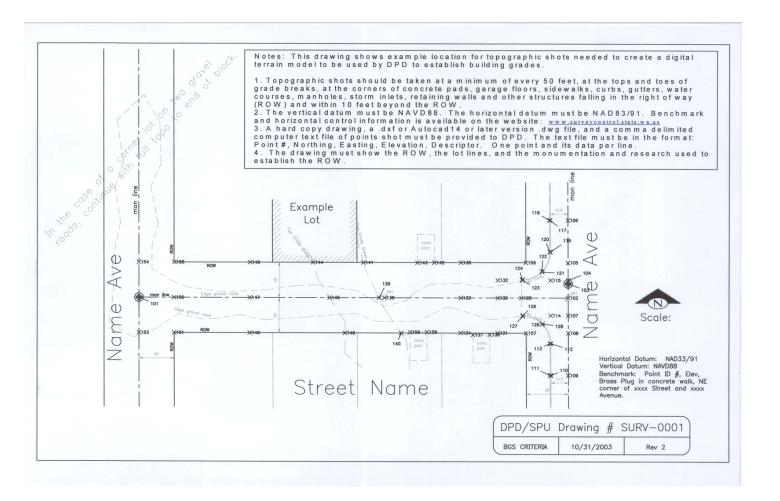
Contact the SPU at (206) 386 0028 for drainage and wastewater requirements.

4. Photos (Optional) - Photos are strongly encouraged. Submit photographs of the project site if these will aid the Seattle Department of Transportation's review process.

For More Information: Contact SDOT "on-call" plan analyst at the DPD Permit Center Seattle Municipal Tower Suite 2000, 700 5th Avenue, or call 684-3679 for details about:

- building grade sheets,
- street design,
- street trees and landscaping, and
- drainage design.





Drafting & Standards Checklist for Street Improvement (Private Contract) Plan Submittal

ш	I wo paper copies on 22° X34° paper for initial copies (black line print)
	Mylar, Sepia or Vellum Sheets 22" x 34" for the final copy
	City of Seattle, Seattle Transportation, Street Improvement Title Block sheet.
	Title Block (CADD templates are available on the Street Use web site)
	Left box - Engineer's seal with signature
	Left box - Engineers name
	Left box - Engineers address
	Left box - Engineers phone number
	Right box - Plan Title (see sample Plan Title on next page): primary street name- 3/8" text (first line) FOURTH AVENUE NW, et al
	Right box - Plan Title: contents of plan- 1/4" text (second line) CC, CW, PSD, WM, PAVING, etc.
	Right box - Plan Title: optional - 1/4" text (third line). (Name of street or subject shown on specific sheet)
	Above Right box - 1/8" text project address, project name optional, and DPD project number
	Screen the base map that shows existing improvements — readable
	Survey Datum (NAVD 88 and NAD83 (1991))
	Show and describe Survey Monuments
	Monument lines with bearing and distance or radius and delta angle
	Street Centerlines, right-of-way width and lines
	Station Monuments
	Dimension by stationing and offsetting from monument lines
	Station all PC (Point of Curvature)
	Station all PT (Point of Tangency)
	Station Matchlines
	Scale Horizontal 1" = 20' (Business Districts 1" = 10')
	Scale Vertical 1" = 10'
	Compass Orientation - North Arrow to the left or top of sheet
	Vicinity Map on cover sheet 1" = 200' (to show reduced version of project perimeter)
	Shade vicinity map for scope of work (work in ROW or Easements, not private property)
	Indicate sheet numbers on vicinity map (see sample on back)
	Lettering minimum size 1/8 inch
	Lettering guide (legible, neat)
	Standard symbols from Standard Plan 002 and 003
	Standard shading from Standard Plan 002 and 003
	Typical Cross Section of Improvements
	Cross Sections (these may be on separate 8.5 x 11 sheets stationed)
	Profile existing grade
	Profile proposed grade (grade point is face of curb)
	Stations at grade breaks and at beginning and end of vertical curves
	Stations and elevation at VPI
	Length of vertical curve
	Station and elevation at high/low point, if any, of vertical curve
	Slope line on plan view
	Catch line on plan view
	Profile existing utilities (water main, PSS, PS, PSD)
	Profile new utilities

Sample Plan Title

3000 NE 130TH STREET

DPD PROJECT # 6070000

NE 130TH STREET

CURB, CW, LANDSCAPE, PAVING, ETC.
PLAN AND PROFILE

Above is a *sample* Plan Title for **Street Improvement Permitting** Plans. The Plan Title is part of the Title Block. The font (type and size) shown in the above sample is listed below, any similar font or lettering template is acceptable.

- 1. The first line is Universal font (size 36, ~ 3/8" high) centered and is the primary street name where the majority of the improvements are located. This is often the frontage street for the project. If the plans include more than one street or alley; then add "ET AL" after the street name. An example is N 130TH STREET ET AL could represent work on N 130th STREET from Greenwood Ave N to 1st Ave NW. A partial improvement along the 900 block of N 130th, would be titled NORTH 130TH STREET. The vicinity map is used to identify multiple streets.
- 2. The second line is Universal font (size 24, ~1/4" high) centered and is the abbreviated contents of the plan. This may include any or all of the following: WM., PSD, PSS, PS, C/W, DRAINAGE, CONC. CURB, LANDSCAPE, SIGNALIZATION, ALLEY PAVING, PAVING, ETC. These abbreviations are in the Standard Plans book.
- 3. The third line is Universal font (size 24, ~1/4" high) centered and is the used to identify the name of the street when multiple streets are involved or the subject shown on a specific sheet. Examples from previous plans: 30TH AVENUE NE, LAKE CITY WAY NE, COVER SHEET, PLAN AND PROFILE, DETAILS, CHANNELIZATION PLAN, TRAFFIC SIGNAL PLAN, SIGNALIZATION SCHEDULES & DETAILS, LIGHTING PLAN, LANDSCAPE PLAN...... This third line can be blank when the plan has only a couple of sheets.

Above the title box is Universal font (size 18, ~1/8" high) left justified as shown and this is where the address of the project is placed. Space permitting the name of the development may be placed here. On this same line use Universal font (size 18) over to the edge of the sheet. Type "DPD PROJECT #", followed by the project number assigned by DPD that required the street improvements shown on the plan. If these improvements are required as a condition of a short plat, use that DPD number. This is for cross reference purposes. If no DPD application or permit is associated with this work, leave this blank.